

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

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PAT & TM OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte MASAYUKI MARUTA, YUKIYA SATO, KATSUTOSHI AOKI,  
YASUNORI INAGAKI, KUNIYASU KAWABE, HISAKAZU TAJIMA and  
SHINJI MORIYAMA

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Appeal No. 1999-2332  
Application No. 08/815,592

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HEARD: January 8, 2002

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Before KIMLIN, GRON, and WALTZ, Administrative Patent Judges.  
WALTZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 2 through 7, 22 through 35, and the examiner's refusal to allow claim 37 as added subsequent to the final rejection.<sup>1</sup> Claims 9 through 21, the only other claims pending in this application, stand withdrawn from

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<sup>1</sup>See the amendment dated Nov. 30, 1998, Paper No. 13, entered as per the Advisory Action dated Dec. 8, 1998, Paper No. 14.

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further consideration by the examiner as being directed to a nonelected invention (Brief, page 2; Answer, page 2).

According to appellants, the invention is directed to a combination of two or more powder coatings usable in a powder coating method for forming a single layer coating film having a visually homogenous hue, where the color of each powder coating is different and the triboelectric charge of each powder is controlled within a specified range (Brief, pages 2-3).

Appellants state that the claims do not stand or fall together and present specific, substantive arguments for the separate patentability of eleven groups (Brief, pages 4-5, with the separate arguments on pages 5-23). Accordingly, pursuant to the provisions of 37 CFR § 1.192(c)(7)(1995), we consider each group of claims separately to the extent each has been argued by appellants. A copy of illustrative independent claims 22 and 26 is attached as an Appendix to this decision.

The examiner relies upon Millar et al. (Millar), U.S. Patent No. 3,860,557, issued on Jan. 14, 1975, as evidence of obviousness (Answer, page 3). The claims on appeal stand rejected under

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35 U.S.C. § 103(a) as unpatentable over Millar (*id.*).<sup>2</sup> We affirm the examiner's rejection essentially for the reasons set forth in the Answer and the reasons stated below.

### OPINION

Implicit in our review of the examiner's obviousness analysis is that the claim must first be construed to define the scope and meaning of each limitation before the claimed subject matter is compared with the applied prior art. See *Gechter v. Davidson*, 116 F.3d 1454, 1457, 1460 n.3, 43 USPQ2d 1030, 1032, 1035 n.3 (Fed. Cir. 1997). During prosecution before the examiner, claims in an application are to be given their broadest reasonable interpretation consistent with the specification, as it would be interpreted by one of ordinary skill in the art. See *In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); *In re Sneed*, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983).

Our claim construction looks at independent claim 22, with analogous construction for the similar language of independent claim 26. Claim 22 recites a combination of two or more powder coatings "for forming a coating film having a visually homogenous

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<sup>2</sup>The final rejection of claims 2-7 and 22-36 under 35 U.S.C. § 102 over Millar has been withdrawn by the examiner (Answer, page 5).

hue." We determine that this preamble does not limit the scope of the claim, merely stating the intended use or capability of the powder coating composition. This preamble does not give meaning to the claim nor is it essential to particularly point out the invention defined by the claims. See *In re Pearson*, 494 F.2d 1399, 1403, 181 USPQ 641, 644 (CCPA 1974).

Both claims 22 and 26 recite that the powder coating composition "comprises" two or more color powder coatings where the color of each powder coating is different.<sup>3</sup> These claims also recite a range of differences in the triboelectric charge of each powder coating (5.0  $\mu\text{C/g}$  or less) and that the particles of each powder coating are not agglomerated. Accordingly, we construe the scope of the claim as including a combination of any two or more non-agglomerated powder coatings, where the powder coatings have different colors (i.e., different pigments or no pigment) and the

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<sup>3</sup>The transitional term "comprising" means that the recited elements are essential but other elements may be added and still be within the scope of the claims. See *Vehicular Tech. v. Titan Wheel Int'l, Inc.*, 212 F.3d 1377, 1383, 54 USPQ2d 1841, 1845 (Fed. Cir. 2000).

triboelectric charges of the powder coatings may be the same<sup>4</sup> or differ by up to 5.0  $\mu\text{C/g}$ .

In view of our claim construction discussed above, we agree with the examiner that the claimed subject matter would have been obvious to one of ordinary skill in this art at the time of appellants' invention in view of the disclosure and teachings of Millar. The examiner finds that Millar discloses a powder coating composition comprising a mixture of discrete polymeric powders useful for electrostatic coatings (Answer, page 4). The examiner further finds that Millar teaches a powder coating composition comprising at least two different powders having quite similar dielectric constants and specific gravities (*id.*, citing col. 4, ll. 11-15). The examiner finds that the particle sizes taught by Millar overlap the range of particle sizes recited in the claims (*id.*, citing col. 5, ll. 3-19). The examiner states that the "quite similar dielectric constants" taught by Millar suggests the similar electrical properties recited in the claims on appeal, such as triboelectric charge, dielectric constant and ratios of

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<sup>4</sup>Since claims 22 and 26 recite that the triboelectric charge difference may be 5.0  $\mu\text{C/g}$  or less, this difference in triboelectric charge includes zero and the powders could be the same material, differing only in the accompanying pigment.

electrical resistance (*id.*).<sup>5</sup> The examiner also relates the "quite similar specific gravities" of Millar to the claimed true specific gravities, apparent densities and softening points (*id.*). We note that appellants do not contest these statements by the examiner (see the Reply Brief).

The examiner finds that Millar teaches powder coatings having various colors such as black, white, and clear (Answer, page 4, citing Examples I, III, and VII). From these findings, the examiner concludes that it would have been obvious to use different color powder coatings in the mixture of discrete polymeric powders having quite similar dielectric constants and specific gravities as taught by Millar (Answer, page 5). We agree.

Appellants argue that Millar "fails to suggest a single layered coating according to the present invention." Brief, page 16. This argument is not well taken since the limitation that the powder coating composition forms a single layered coating cannot be found in the claims on appeal.

Appellants disagree with the examiner's interpretation of col. 4, ll. 11-15, of Millar, namely arguing that this portion of

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<sup>5</sup>We note that Millar suggests a relationship between dielectric constant and a triboelectric series having different degrees of electrostatic charge (i.e., "chargeability"). See col. 3, ll. 21-29, 53-56, and col. 4, ll. 16-21.

Millar, taken in its full context, suggests a multi-layered structure where a single layer is composed of a single powder, the single powder itself comprising two or more materials (Brief, page 17). We agree with the examiner's interpretation that Millar suggests a single layer comprising two or more specific materials. Millar teaches the following at col. 4, ll. 11-15:

It will, of course, be realized that one component or *one final layer* in the coating may be itself a mixture of two or more specific materials - e.g., two or more thermoplastic polymers having quite similar dielectric constants and quite similar specific gravities.  
[Emphasis added].

It is clear from the language employed by Millar that one layer may be a mixture of two or more thermoplastic polymers (i.e., powder coatings). Accordingly, from this teaching of Millar, we agree with the examiner that Millar suggests a mixture of two or more specific materials in one layer.

Appellants argue that even if the examiner's interpretation of Millar is correct, the reference still fails to suggest that the colors of the two or more powder coatings are different (Brief, page 17). This argument is not persuasive. The examiner has found that Millar teaches individual powder coatings of different colors (Answer, page 4) and we determine no error in the examiner's conclusion that it would have been within the ordinary skill in the

art to use powder coating compositions in the mixture of two or more specific materials in Millar where the colors (pigments) were different (Answer, page 5). Appellants submit that the examiner's reliance on routine practice in the paint art for choosing different color powders to obtain a desired final color appears to be confusing the paint art with the powder coating art (Reply Brief, pages 1-3; see the Answer, page 5). However, although the paint art is different than the powder coating art, appellants have not refuted the examiner's statement that the problem and solution in both arts are the same, namely lack of a desired color may be compensated for by mixing different colors to produce the final desired color (Answer, page 5).<sup>6</sup>

Appellants argue that claim 37, in addition to the arguments noted above, additionally requires a resin and at least one colorant (Brief, page 19). This argument is not well taken since various resins and colorants are disclosed by Millar (see the Examples).

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<sup>6</sup>We note that Millar teaches that the epoxy powder with pigment was dispersed in a blender until it became a "homogenous blend." See col. 11, l. 2. Accordingly, Millar would have suggested that any mixture of different colors be a "homogenous blend" and thus produce a homogenous hue (see the Answer, page 4).



Appellants argue that claims 2 and 27 additionally require certain values for the true specific gravity (Brief, page 19). As discussed above, the examiner states that the specific gravities taught by Millar would have suggested the claimed true specific gravities and appellants have not contested this statement (Answer, page 4). We note the similar arguments regarding the apparent densities of claims 3 and 28, the softening points of claims 4 and 29, and the ratios of electric resistance of claims 6 and 31 (Brief, pages 19-21). The dielectric constants argued for claims 5 and 30 (Brief, page 20) and the particle sizes argued for claims 23, 24, 34 and 35 (Brief, pages 21-22) are disclosed or suggested by Millar (see col. 4, ll. 21-25; col. 5, ll. 3-19).<sup>7</sup>

Appellants argue that claims 7 and 33 additionally require that at least one powder coating is a white powder coating containing a white pigment (Brief, page 22). Example III of Millar employs a white pigment and, as discussed above, the combination of different color powder coatings would have been well within the ordinary skill in the art.

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<sup>7</sup>For example, if the thermoplastic polymers of Millar possess dielectric constants of about 2.0, Millar teaches that these constants should differ by a factor of 0.1 which would be an absolute value of about 0.20.

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As noted by the examiner (Answer, page 9), claim 32 merely requires the selection of two or more powder coating compositions from any of claims 26-31 and thus would have been obvious for the reasons stated above with respect to claims 26-31.


For the foregoing reasons and those set forth in the Answer, we determine that the examiner has established a *prima facie* case of obviousness in view of the reference evidence. Based on the totality of the record, including due consideration of appellants' arguments, we determine that the preponderance of evidence weighs most heavily in favor of obviousness within the meaning of 35 U.S.C. § 103. Accordingly, the examiner's rejection of the claims on appeal under 35 U.S.C. § 103(a) over Millar is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED**

*Edward C. Kimlin*  
EDWARD C. KIMLIN  
Administrative Patent Judge

  
TEDDY S. GRON  
Administrative Patent Judge

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THOMAS A. WALTZ  
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#### APPENDIX

22. A combination of two or more powder coatings for forming a coating film having a visually homogeneous hue, comprising two or more color powder coatings wherein the color of each powder coating is different, wherein a difference in triboelectric charge of said two or more powder coatings is 5.0  $\mu\text{C/g}$  or less; and wherein particles of each powder coating are not agglomerated.

26. A powder coating composition capable of forming a coating film having a visually homogenous hue which comprises two or more color powder coatings wherein the color of each powder coating is different, a difference in triboelectric charge of said two or more powder coatings is 5.0  $\mu\text{C/g}$  or less; and wherein particles of each powder coating is not agglomerated.